

WILKINGIA GEN. NOV. TO REPLACE
ALLORISMA FOR A GENUS OF
UPPER PALAEOZOIC LAMELLIBRANCHS

by R. B. WILSON

ABSTRACT. The Upper Palaeozoic lamellibranch genus *Allorisma* King 1844 is placed in the synonymy of *Edmondia* de Koninck 1842, as the type species, *Sanguinolaria sulcata* Phillips 1836, is conspecific with *Hiatella sulcata* Fleming 1828, the latter species being an *Edmondia*. The name *Allorisma* King 1850, for a sinu-pallial form, is replaced by the new name *Wilkingia*. The type species *Wilkingia* [*Venus*] *elliptica* (Phillips) is described.

THE author's revision of the Carboniferous lamellibranch species described by John Fleming (Wilson, *Bull. Geol. Surv. Gt. Brit.*, in press) has revealed that the surviving type specimens of *Hiatella sulcata* Fleming 1828, and *Sanguinolaria sulcata* Phillips 1836, are conspecific, and that the species should be assigned to *Edmondia* de Koninck 1842. On morphological grounds Fleming's original assignation of the species to *Hiatella* Daudin, a synonym of *Saxicava* Fleuriau, cannot be accepted. Of the original specimens named *Hiatella sulcata* by Fleming, seven still remain. Of these, one is selected as lectotype (Wilson, op. cit.); of the remainder three are indeterminable. Only one syntype of Phillips's species *Sanguinolaria sulcata* has survived. This specimen, although not Phillips's original figured specimen, was figured by Hind (1899, p. 321, pl. 34, fig. 3) as the probable type of Phillips's species. It has proved to be conspecific with the determinable syntypes of Fleming's species. *Hiatella sulcata* possesses well-developed internal cartilage plates and a non-sinuate pallial line, and has been assigned to *Edmondia* de Koninck. King (1844, p. 313) selected *Sanguinolaria sulcata* Phillips as the type species of his new genus *Allorisma*, emphasizing the presence of internal cartilage plates (fulcra) in the genus. Later, King (1850, p. 163) acknowledged the fact that de Koninck had already described these internal cartilage plates in *Edmondia*, and that species which he (King) had formerly placed in *Allorisma*, should be assigned to *Edmondia*. Unfortunately, he retained the name *Allorisma*, altering the diagnosis to include forms with a pallial sinus and without internal cartilage plates. For the modified genus he took *Hiatella sulcata* Fleming as type species, claiming that this species possessed a pallial sinus. The study of Fleming's specimens does not support this contention. To illustrate the genus, King (1850, pl. 20, fig. 5) figured a specimen possessing a pallial sinus which he called '*Allorisma sulcata* Fleming', but this specimen belonged to a species previously briefly described, figured and named *Venus elliptica* by Phillips (1836, p. 209, pl. 5, fig. 7). From morphological considerations, this form cannot be assigned to *Venus*, *Myacites* (Salter 1861, p. 221, pl. 1, fig. 28), or *Edmondia*, and as the name *Allorisma* is not available, it, and related species require to be grouped in a new genus for which the name *Wilkingia* is proposed, with *Wilkingia elliptica* (Phillips) here designated as type species.

Hind (1900, p. 422) recognized that the form King had figured as *Allorisma sulcata* was the same as that named *Venus elliptica*, but he used the name *Allorisma sulcata* for the species, as he considered that some examples of it were used by Fleming when describing *Hiatella sulcata*. The study of Fleming's syntypes does not support this view.

Phillips (1836, p. 247) stated that the specimen he figured as *Venus elliptica*, here designated the lectotype of the species, was in the collection of the Yorkshire Philosophical Society, which is now housed in the Yorkshire Museum, York. The specimen cannot be found and is presumed lost. The specimen King (1850, pl. 20, fig. 5) figured as *Allorisma sulcata* is also missing. Unsuccessful searches for it have been made in the Hancock Museum, Newcastle upon Tyne, and University College, Galway, the two institutions in which it is most likely to have been preserved. The following descriptions are based on fourteen specimens in the collections of the Geological Survey and Museum, London, from Redesdale, Northumberland, which the author considers to be conspecific with *Venus elliptica* Phillips.

WILKINGIA gen. nov.

Type species *Venus elliptica* Phillips

Diagnosis. Elongate-oval lamellibranchs, equivalved, markedly inequilateral. Umbones placed far forward, their anterior border continuous with anterior margin of valve. Anterior and posterior extremities rounded, ventral margin gently convex, postero-dorsal edge straight or almost so. A broad, shallow sinus runs ventrally from the umbones in anterior half of valves. Escutcheon and elongate lunule present. Umbonal ridge poorly developed. Valves concentrically sulcate. Rows of small tubercles present, especially on postero-dorsal area. Adductor muscle scars shallow, pallial sinus present, hinge simple, probably edentulous.

Wilkingia elliptica (Phillips)

Plate 71, figs. 1-6

Venus elliptica Phillips 1836, p. 209, pl. 5, fig. 7.

? *Posidonomya transversa* Portlock 1843, p. 745, pl. 38, fig. 9.

Allorisma sulcata King 1850, pl. 20, fig. 5.

EXPLANATION OF PLATE 71

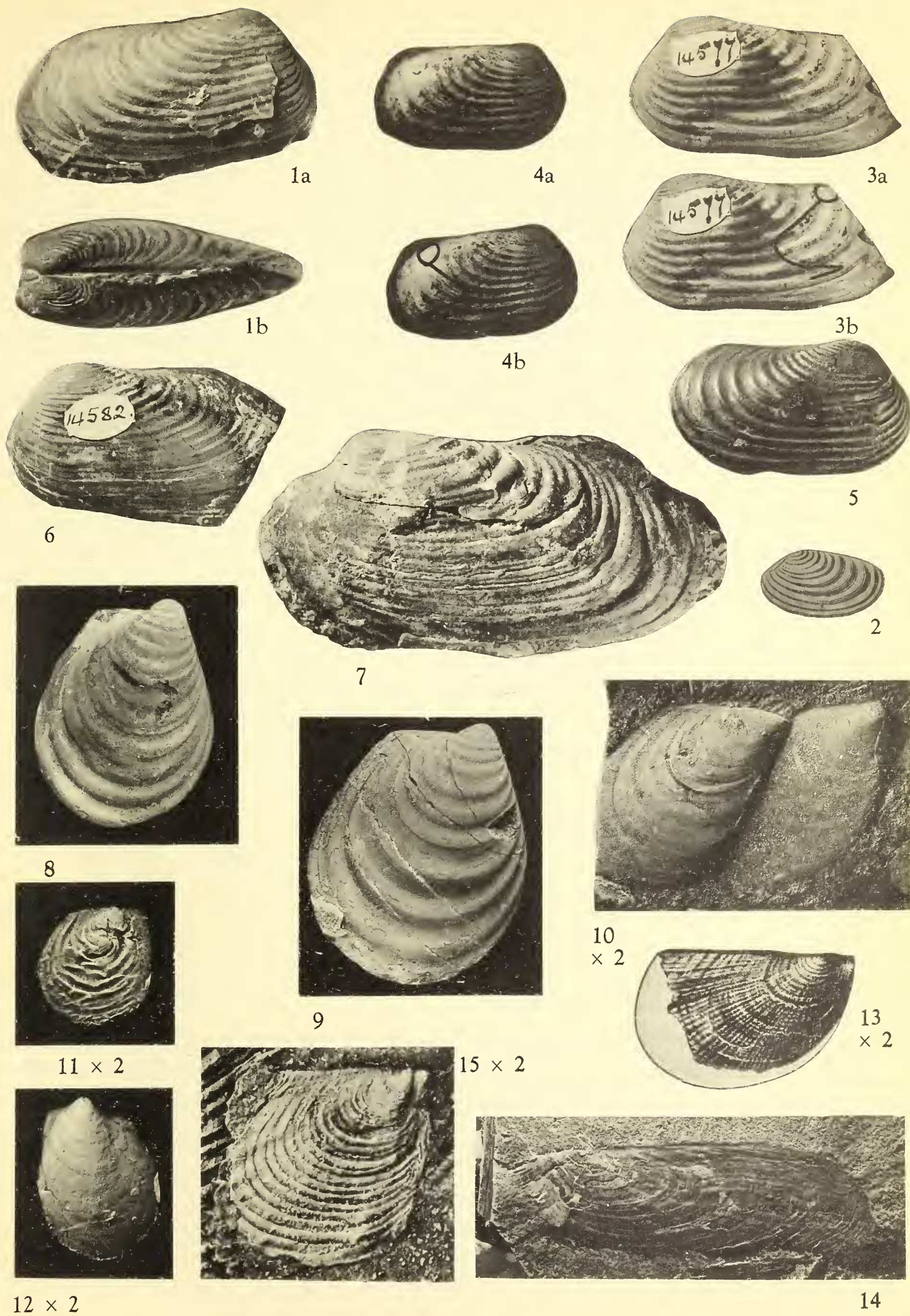
Figs. 1-6. *Wilkingia elliptica* (Phillips). All except figs. 3*b* and 4*b* are unretouched photographs, natural size. The specimens are in the Geological Survey and Museum, London. 1*a*, 14579, Redesdale, Northumberland, right valve, internal cast with part of original shell under umbo. 1*b*, Same specimen, dorsal view, showing lunule and elongate escutcheon. 2, Lectotype, reproduction of Phillips's original drawing of *Venus elliptica*, specimen lost. 3*a*, 14577, Redesdale, left valve, internal cast. 3*b*, Same specimen, part of pallial line and muscle scar as observed by author, drawn on photograph. 4*a*, 14586, Redesdale, right valve, internal cast. 4*b*, Same specimen, part of pallial line and muscle scar as observed by author, drawn on photograph. 5, 15823, Redesdale, right valve, internal cast of almost complete specimen. 6, 14582, Redesdale, left valve, internal cast showing rows of fine tubercles on postero-dorsal area.

Fig. 7. *Edmondia sulcata* (Fleming). Left valve of specimen in Hancock Museum, Newcastle upon Tyne, to show different ornament and shape of anterior from *Wilkingia elliptica*, $\times 1$.

Figs. 8-10. *Posidoniella* spp. 8, 9, *P. vetusta* J. de C. Sowerby, Carboniferous Limestone Series. 8, British Museum (Natural History) PL. 357, $\times 1$, Derbyshire. 9, PL. 803, $\times 1$, the lectotype, Castleton, Derbyshire. 10, *P. variabilis* Hind, Millstone Grit Series, Manchester Museum L. 10227, $\times 2$.

Figs. 11, 12. *Posidonia obliquata* (Brown), Millstone Grit Series, Lower *Reticuloceras* age, $\times 2$.

Figs. 13-15. *Caneyella* spp. 13, *C. richardsoni* Girty, reproduction of Girty 1909, pl. 4, fig. 1, Caney Shale, Oklahoma. 14, *C. membranacea* (M'Coy), $\times 1$, Carboniferous Limestone Series, Upper *Posidonia* age. 15, *C. rugata* (Jackson), Millstone Grit Series, Upper *Reticuloceras* age, $\times 2$.



WILSON, *Wilkingia* gen. nov.
RAMSBOTTOM, Carboniferous Lamellibranchs

